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1: WORK ASSIGNME	NT INFORMATION		- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	**************************************	
Project Name:	Libby		WA No.: 13	7-RIRI-08BC Revis	ion No:
Activity RI		EPA Contract No.:	68-W5-0022	Modification No.: (C.O. Use Only)	
	CDM FEDERAL PROGRAMS	Contractor Contr		Document ID	Date: 4/30/0
2. DESCRIPTION OF	ACTION			2022896	3 12 11 17 17 17 17 17 17 17 17 17 17 17 17
X New Work Assignment (Need WP for WA) Attach SOW /schedule Designate WAM	Work Assigns Amendment Change in LOE or sectask Add additional tasks of funds for increased ac	WP Disapprove Final WP Approve Amendment to Approval	al Det scheroval Min chair Final WP Chair Min LOE, scope or Se	echnical Direction Lemorandum ails on scope, budget or edule or shift within SOW (no ige in \$/LOE) ige in WAM tor revise Expenditure	Incremental Funds Fund approved WP WA Closeout Notification Notify contractor to initiate WA closeout task Revise EL after final invoice
3. BUDGET INFORM/	ATION • FEES INCLUI	Approve addition		Action Code	Other (see commen
То	A X Term Form WA tal Funding Received (\$)*	Approved Work LOE (Term WA only)	Plan Budget (\$)	LOE (Term WA only)	re Limit (EL)
Current	\$600,000	O	\$0	500	\$50,
		Fa. 1.1.11.11.11.11.11.11.11.11.11.11.11.1	\$2,041,482	4,500	\$550,
This Action	\$0	19,547	32,041,462		*:
This Action	\$600,000	19,547	\$2,041,482	5,000	\$600,
	\$600,000	19,547	er e	ia-	411
Total	\$600,000	19,547	\$2,041,482		\$600,
Total 4. WA COMPLETION 5. EPA COMMENTS: THIS WAF INCREASES	\$600,000 DATE EXPENDITURE LIMITS. APPROVES ORIGINAL	19,547 Current:	\$2,041,482 12/31/04	Revised:	\$600,
Total 4. WA COMPLETION 5. EPA COMMENTS: THIS WAF INCREASES THIS WAF PARTIALLY	\$600,000 DATE EXPENDITURE LIMITS. APPROVES ORIGINAL SK 5.	Current:	\$2,041,482 12/31/04	Revised:	\$600,
4. WA COMPLETION 5. EPA COMMENTS: THIS WAF INCREASES THIS WAF PARTIALLY SUBTASK 1.8, AND TAS	\$600,000 DATE EXPENDITURE LIMITS. APPROVES ORIGINAL SK 5.	Current:	\$2,041,482 12/31/04	5,000 Revised: PROVES ALL TASKS EXC	\$600,
Total 4. WA COMPLETION 5. EPA COMMENTS: THIS WAF INCREASES THIS WAF PARTIALLY SUBTASK 1.8, AND TAS 6. APPROVALS (Signate)	\$600,000 DATE EXPENDITURE LIMITS. APPROVES ORIGINAL SK 5.	Current:	\$2,041,482 12/31/04 16, 2003. THIS WAF API	7,000 Revised: PROVES ALL TASKS EXCE	\$600,



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 8
999 18TH STREET - SUITE 300
DENVER, CO 80202-2466
Phone 800-227-8917
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Memo to Work assignment #137-RIRI-08BC

The Wam Jim Christiansen has reviewed the original work plan dated April 16, 2003. He has met with CDM and during a fact finding meeting found that some changes needed to be made on Subtask 1.5, Subtask 1.8, and Task 5.

The WAM is currently approving all other areas of the work assignment. The above Subtask 1.5 and Subtask 1.8 and Task 5 will not be not be approved at this time. CDM has broken out the costs for the 2003 season and the 2004 season and a total of both. Here is the break down of the costs that are not approved:

Task 5 (in 2003/2004) total budget:	\$80,105 1,096 LOE
Subtask 1.5 (in 2003 budget pages)	\$17,413 105 LOE
Subtask 1.8 (in 2003 budget pages)	\$104,639 1,100 LOE
Subtask 1.5 (in 2004 budget pages)	\$18,969 96 LOE
Subtask 1.8 (in 2004 budget pages)	\$120,855 1300

A grand total of 3,697 LOE is not being approved and \$341,981.00 in dollars is not being approved at this time. The contractor is currently revising the costs for the above and will be resubmitting change pages to reflect the outcome of the fact finding meeting. After submittal by contractor, WAM will review the above subtasks and tasks to determine approval at a later date.

Total budget approved with this WAF will be 19547 LOE and \$2,041482.00 in dollars.

Technical Review (April 19, 2003) Libby Asbestos Site WA#137-RIRI-08BC Work Plan Rev 0 dated April 16, 2003

The work assignment is primarily for a large field effort in support of the remedial investigation of residential/commercial properties at the Libby Asbestos Site. This field effort involves numerous full-time positions in Libby, numerous support roles away from Libby, and personnel visiting Libby to conduct sampling. It is an extremely complex task to scope and estimate, and because of the large scope and remote location of the work, even minor differences in estimation can lead to large differences in cost.

The IGCE for the work assignment, prepared on 2/19/03, estimated a total cost and fee of approximately \$841,430 and 8,605 PLOE. The original work plan submitted by CDM on 4/16/03 estimated a total cost and fee of \$2,383,463 and 20,138 PLOE. Obviously these numbers are substantially different - a difference of approximately 11,000 PLOE which must be addressed. However, several easily identifiable factors in Tasks 1 and 2 account for most of the difference. These are discussed below and in subsequent pages. The IGCE estimates for Tasks 3, 4, 5, and 6 are not radically different from those in the work plan. Because any differences do not have a large impact on the overall WA, these tasks are not discussed further in the context of the overall work assignment, but are addressed only in the detailed analysis of each task.

Overall Work Assignment Tech Review - Key Issues

- 1. Differences in staffing levels affect cost differences. For instance, the project manager for the work assignment, Jeff Montera, is a P2. The IGCE assumed a P1 based upon my understanding of the Jeff Montera's status. My understanding was outdated, as Jeff moved from a P1 to a P2 since I scoped the previous work assignment he was involved in. Because P2 rates are approximately 25% greater than those of a P1, this accounts for a large portion of the cost difference in Task 1 (as well as other tasks to a lesser amount). Similarly, some samplers in Task 2 are P2s as opposed to P1s. There are other instances of this; but overall, the staffing levels chosen by CDM are appropriate, based upon labor available, and are acceptable to the WAM.
- 2. Between the preparation of the IGCE and the preparation of the work plan, there has been some growth in the total number of properties requiring sampling as more information from 2002 field work became available (1500 properties estimated in IGCE; 1800 properties in CDM proposal). CDM based their estimates on actual data from the 2002 field season and these should be considered accurate. This increases the scope of Task 2 by approximately 20% and accounts for approximately 2000 PLOE hours not accounted for in the IGCE using CDM's average labor hours per property as discussed below.
- 3. WAM assumptions for the amount of labor required for each property, and thus the total field effort, are substantially different from those proposed by CDM. Using a round number of approximately 1800 total properties requiring sampling in CDM's proposal, this amounts to approximately 6.5 sampler labor hours per property. Using a round number of approximately

1500 total properties requiring sampling for the IGCE, this amounts to approximately 3.3 sampler labor hours per property - roughly half. This accounts for a difference in the overall Task 2 estimate of approximately 6000 PLOE hours. Together with (2) above, this accounts for roughly 8000 PLOE hours, and 4/5 of the approximately 10,000 total PLOE difference in Task 2 between the IGCE and the work plan. The remainder of the difference is addressed in (4) below.

The 6000 PLOE difference in sampler labor estimates stems from a few basic differences in estimation. First, I did not account for non-typical properties, which are discussed in the work plan and are important to the execution of the RI. These properties will generally require a fulltime sampler of their own merit. Second, I envisioned one sampler per residential property in general (about 4-5 total full-time samplers required), whereas CDM assumed two samplers per property (8 full-time samplers required). I believed this was possible because the sampling required last year was more complex than some of the sampling required this year, resulting in less hours per property and overall less complex work assignment. I envisioned that because similar work was conducted last year, that improvements in efficiency and less labor hours would be required. While I still believe this is the case to some degree, I have discussed this with CDM and we agree that we cannot assume increased efficiency a priori - this could lead to understaffing, delays, and poor cost efficiency if the assumption proved wrong. Because of the nature of the work in Libby, even if there is some increased efficiency per property, samplers must still be on-site full-time and it may not decrease the duration of the field work overall. CDM has also presented several ways the work will be more difficult than last year which I did not consider. and firmly believes that two samplers are required for all properties. Again, we have discussed this and CDM has presented their rationale. The WAM agrees and will closely monitor personnel utilization and fund the project incrementally. This similarly affects travel for Task 2.

- 4. The IGCE did not account for a full-time P4 for the duration of the field effort in Task 2. This P4, Dave Schroeder, will work on various tasks in Libby supported by CDM, but mostly on this work assignment. I previously had evenly spread his labor over several tasks under separate contracts, but instead we have removed his time from those contracts and placed it all here. This is acceptable to the WAM.
- 5. ODCs vary significantly from task to task from IGCE to work plan, but I accounted for all of my ODC's in general categories under Task 2, whereas CDM spread their ODCs out among tasks in a more detailed estimate. The overall values (\$113,601 IGCE vs. \$87,956 CDM) are not substantially different and will not be addressed in the detailed analysis of tasks. The same applies for clerical hours all of my hours (440) are in Task 1, whereas CDM's (314) are spread among tasks.
- 6. WAM did not account for a full-time database (eLASTIC) specialist in this work assignment, as I expected to put this task onto a different contract and task order with for database support CDM through the Dept of Transportation. CDM elected to place this work (which directly supports field work) under this WA, which is acceptable to WAM. This accounts for approximately 1700 P2 hours in Task 1 not included in the IGCE.



United States Environmental Protection Agency Region VIII, Denver CO

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TECHNICAL REVIEW

WA NUMBER: 137-RIRI-08BC

WP REVISION NUMBER: 0

WP DATE: 04/16/2003

TASK NUMBER: 1

DESCRIPTION: Project Planning and Support

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	IGCE	WP	DIFF		\$107,186 IGCE	\$521,613 WP	414427 DIFF
P4	89	481	392	TOTAL ESTIMATE .	\$0.00	\$0.00	\$0.00-
P3	0	16	16	TOTAL LABOR COSTS	72,941	341,785	268844
P2	204	4199	3995	TRAVEL COSTS	7,500	24,954	17,454
P1	965	644	-321	OTHER DIRECT COSTS	2,976	24,824	21,848
T3				COMPUTER COSTS	1390	6450	5060
T2				EQUIPMENT COSTS	0	0	0
T1				PLI PREMIUM	0	12,447	12447
Total Hours	1258	5340	4082	SUBCONTRACT POOL	0	0	0
Cler.	440	108	-332]		·-	<u> </u>

WAM Review, Comments and Recommendations:

- See Note (6) on Overall WA Tech Review for discussion on portion of P2 LOE difference.
- See Note (5) on Overall WA Tech Review for discussion on clerical and ODC difference.
- 3. Based on input from EPA, CDM included Subtask 1.11 for QA support which is acceptable to WAM.
- 4. WAM feels costs for Subtask 1.8 in Work Plan are too high and overestimate amount of P2 project manager and P4 Program Manager time required for management of the work assignment, especially for 2004 when no substantial field work is scoped. This requires negotiation.
- WAM feels too many planning trips are scheduled and should be reduced. This affects PLOE and travel. This requires negotiation.

Recommendation: Discuss expectations with CDM and submit revised work plan addressing Subtask 1.8 and Subtask 1.5. All other Subtasks acceptable to WAM.

Project Officer Comments and Recommendations:

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United States Environmental Protection Agency Region VIII, Denver CO

Page1 of 1

TECHNICAL REVIEW

WA NUMBER: 137-RIRI-08BC

WP REVISION NUMBER: 0

WP DATE: 04/16/2003

TASK NUMBER: 2

DESCRIPTION: Field Investigation

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	IGCE	WP	DIFF		670,406 166E	1,733,52 ₄ WP	1,067,18 1 DIFF
P4	200	1680	1480	TOTAL ESTIMATE	\$0:0\$	\$0.00	\$0.00
P3	0	0	0	TOTAL LABOR COSTS	278,105	760,804	482699
P2	200	6116	5916	TRAVEL COSTS	100,000	252,170	152,170
P1	5950	4608	-1342	OTHER DIRECT COSTS	110,625	61,013	-49612
Т3	0	3840	3840	COMPUTER COSTS	0	0	0
T2	}		L	EQUIPMENT COSTS	50,000	50,400	400
T 1				PLIPREMIUM	Ö	0	0
Total Hours	6350	6244	9894	SUBCONTRACT POOL	0.	52,039	52,039
Cler.	0	112	112	Tean Sabs	٥	222,603	272603

WAM Review, Comments and Recommendations:

- Most differences for this task are addressed in overall WA Tech Review in numbers 1-5. These points will not be reiterated here.
- 2. Note that CDM has sampler hours in CDM PLOE (P1,P2), Team Sub PLOE (T3), and in subcontractors. This is to ensure the lowest P levels are utilized for sampling and is satisfactory with the WAM.

Recommendation:. Accept Task 2 work plan and estimates. Mento

Project Officer Comments and Recommendations



United States Environmental Protection Agency Region VIII, Denver CO

Page1 of 1

TECHNICAL REVIEW

WA NUMBER: 137-RIRI-08BC

WP REVISION NUMBER: 0

WP DATE: 04/16/2003

TASK NUMBER: 3-6

DESCRIPTION: Sample Analysis, Data Entry, RI Reporting, Close Out

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	IGCE	WP	DIFF		49,155 IGCE	98,851 WP	49,696 g
P4	72	162	90	TOTAL ESTIMATE	30.00	\$0.00	\$0.00
P3	0	0	0	TOTAL LABOR COSTS	49,155	96,732	47,577
P2	260	606	346	TRAVEL COSTS	0	0	0
P1	665	892	227	OTHER DIRECT COSTS	0	2119	2119
Т3		· · · · ·	1	COMPUTER COSTS	0	0	0
T2	<u>-</u>		<u>a</u>	EQUIPMENT COSTS	0	0	0
T1				PLI PREMIUM	0	0	0 ·
Total Hours	491	1660	663	SUBCONTRACT POOL	0	0	0
Cler.	20	94	74		•		

WAM Review, Comments and Recommendations:

- Tasks 3-6 were summed for this page. These tasks are small in relation to the overall work assignment scope and costs.
- 2. The primary difference in these tasks is found in Task 5. CDM has scoped more technical memorandums, lly more effort for preparation of each technical memorandum, and more effort of the RI Tech Memo. This task requires negotiation.

Recommendation: Accept Tasks 3,4 and 6. Discuss expectations with CDM and submit revised work plan for Task 5. \(\bar{\cappa}\)/

Project Officer Comments and Recommendations	rculy	War	22	
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WA#:	137-RI	RI-08BC

WP	REVISION#:	
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WP DATE:

TECHNICAL REVIEW (R8 RAC CONTRACT)

TASK	NO.3			DESCRIPTION:			
LC	DE CON	PARIS	ON	C	OST COMPARI	SON	
	IGC E	WP	DIFF	·	IGCE	WP	DIFF
P4	0	0.	0	TOTAL ESTIMATE	12479	12522	-43
P3		0	0	TOTAL LABOR COSTS	12479	11809	670
P2		168	-168	TRAVEL COSTS	0		0
Pl	300	32	268	OTHER DIRECT COSTS	0	713	-713
Т3			0	COMPUTER COSTS	0.	<u> </u>	0
T2			0	EQUIPMENT COSTS	0		0
Tl		<u></u>	0	PLI PREMIUM	0		0
Total Hours	300	200	100	SUBCONTRACT POOL	0		0
Cler.	0	0	0				

WAM Review, Comments and Recommendations: See attached explanation by WAM:

Project Officer Comments and Recommendations: Concur with WAM.

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TECHNICAL REVIEW (R8 RAC CONTRACT)

	TASK NO. 4			DESCRIPTION:			
LC	IGC E	WP	DIFF		OST COMPARIS IGCE	SON WP	DIFF
P4	10	0	10	TOTAL ESTIMATE	15445	22928	-7,483
P3	0	0	0	TOTAL LABOR COSTS	15445	22274	-6,829
P2	160	340	-180	TRAVEL COSTS	0	0	0
Pl	180	0	180	OTHER DIRECT COSTS		654	-654
T3			0	COMPUTER COSTS	0	0	0
T2			0	EQUIPMENT COSTS	0	0	0
TI	<u></u>		0	PLI PREMIUM	0	0	0
Total Hours	350	340	10	SUBCONTRACT POOL	0	0	0
Cler.	0	0	0			,	

WAM Review, Comments and Recommendations: See attached explanation by WAM.

Project Officer Comments and Recommendations: Concur with WAM.

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	WA #:	137-RIRI-08BC
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ΝД	REVISION#:	
WP	K E V I SIUJIVA:	

WP	DATE:	
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TECHNICAL REVIEW (R8 RAC CONTRACT)

TASK NO.6				DESCRIPTION: COST COMPARISON			
L€	LOE COMPARISON						
	IGC E	WP	DIFF		IGCE	WP	DIFF
P4	2	2	0	TOTAL ESTIMATE	2462	2043	419
P3		0	0	TOTAL LABOR COSTS	2462	1926	536
P2	40	18	22	TRAVEL COSTS			0
Pl		4	-4	OTHER DIRECT COSTS		117	-117
Т3			0	COMPUTER COSTS			0
T2			0	EQUIPMENT COSTS	0		0
Τl			0	PLI PREMIUM	0		0
Total Hours	42	24	18	SUBCONTRACT POOL	0		0
Cler.	20	14	6				

WAM Review, Comments and Recommendations: See attached explanation by WAM. Christian
Project Officer Comments and Recommendations: Concur with WAM. 4 (30) 03